Enclosed type

RU77₋₄₀₉₆

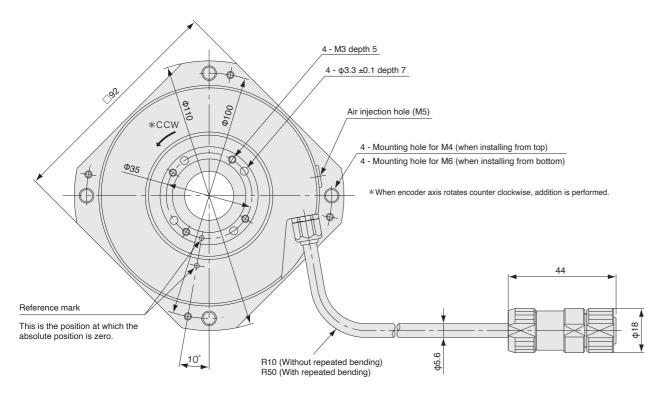
- · Space saving can be achieved with a thickness of up to 42 mm.
- Magnetic system enables use even in environments with condensation, oil, and other adverse conditions
- · Internal coupling allows for design and mounting flexibility

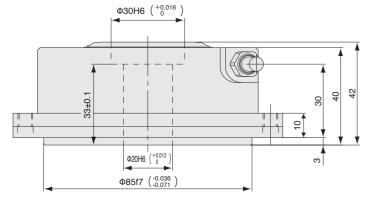


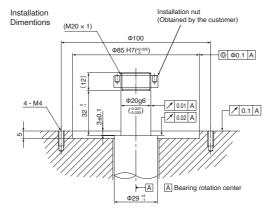
Mitsubishi Electric

YASKAWA Electric

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Details of model designation

Magnescale reserves the right to change product specifications without prior notice.

Encoder

Mass

Model name

Output wave number

Accuracy (at 20°C) Output signal

Through hole diameter

Compatible controllers Maximum resolution

Maximum response revolutions

Maximum mechanical revolutions

Product Safety

Product Environment

Operating temperature

Storage temperature

Vibration resistance

Consumption current

Starting torque (at 20°C)

Maximum cable length

Standard compatible cable

Moment of inertia

Impact resistance Protective design grade Power supply voltage

RU77-4096A□△★○○

[]] [[6	SOIULIOIT		
Туре	Resolution	Number of pulses/revolution	Number of partiti
Α	Approx. 2.5°/1,000	131,072	1/
В	Approx. 1°/1,000	262,144	1/
С	Approx. 7°/10,000	524,288	1/1
D	Approx. 3.5°/10,000	1,048,576	1/2
E	Approx. 2°/10,000	2,097,152	1/5
F	Approx. 1°/10,000	4,194,304	1/1,0
G	Approx. 4.5°/100,000	8,388,608	1/2,0
Н	Approx. 2°/100,000	16,777,216	1/4,0
J	Approx. 1°/100,000	33,554,432	1/8,1

l	Approx. 2°/10,000	2,097,152	1/512
	Approx. 1°/10,000	4,194,304	1/1,024
	Approx. 4.5°/100,000	8,388,608	1/2,048
ĺ	Approx. 2°/100,000	16,777,216	1/4,096
	Approx. 1°/100,000	33,554,432	1/8,192

SKAWA Electric: D,F only

CH33A-***. CE28A-***

CH33A-***: 30 m, CE28A-***: 15 m

RU77-4096A□A★○○

FANUC

	[★]Connector	
ſ	Connector	Des

Commodia	Description	Hemans
Metal water proofing	G	main cable length Max.9 m, extension cable: CE28 / CE28A *Max cable length (main + extension): 15 r
Plastic water proofing	J	main cable length Max.1 m, extension cable: CH33 / CH33A *Max cable length (main + extension): 30 r

[∇]Cable seath (covering

Written by flush right,	
ndication in "m" units,	
up to 30 m, 1 m pitch	

Cable

(Example)		[O]Co	nduit
Type	Cable length	Туре	Conduit
07	7 m	С	With conduit
26	26 m	N	Without conduit

CH33-□□○▽*#

CH33 A- \square \square \bigcirc \triangledown * #

CE28-	
CE28 A-	□ □ □ ○ *
	(CE28A · FANUC model only)

[□□□] Cable length Written by flush right, indication in "10cm" units. up to 14m,1m pitch

(Example)			[O]Conduit		
Type	Cable length		Type	Conduit	
070	7 m	П	С	With cond	
090	9 m		N	Without co	
130	13 m				

[#]Encoder side connector :

RU77-4096A□B★○○

RU77-4096A□D★○○

4,096 waves/revolution

ф20 mm

±2.5"

Absolute serial bidirectional signal, compliant with EIA-485

2,000 min⁻¹

3,000 min⁻¹

FCC Part15 Subpart B Class A

ICES-003 Class A Digital Device

EN/BS 61000-6-2, EN/BS 61000-6-4

EN/BS 63000

0 to +60°C

-10 to +60°C

150 m/s² (50 Hz to 2,000 Hz)

1,000 m/s² (11 ms)

DC +4.75 to +5.25 V (with connectiong terminal)

200 mA (at 120Ω termination)

9.4 × 10⁻⁵ kg·m² or less

0.1 N·m or less

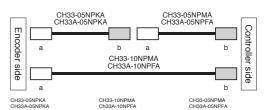
Approx. 1.2 kg or less

Mitsubishi Electric

25 bit (33,554,432 pulses/revolution)

* Contr	Controller side connector : b				
Type	Specification	Remarks			
None	Open-end	Standard			
M	10P made by 3M	Mitsubishi Electric NC, J3, J4			
F	20P straight case made by Honda Tsushin Kogyo	FANUC			
G	6P made by Molex Japan LLC	YASKAWA Electric			
J	Horizontal drawing case made by HIROSE Electric	FANUC			
K	10P JN1 (Male) made by Japan Aviation Electronics Industry	Relay			

[*]Controller side connector : b				
Type	Specification	Remarks		
None	Open-end	Standard		
M	10P made by 3M	Mitsubishi Electric NC, J3, J4		
F	20P made by Honda Tsushin Kogyo	FANUC		
G	6P made by Molex Japan LLC	YASKAWA Electric		
J	10P (JB1) made by Japan Aviation Electronics Industry	RU77 cable extention		
K	10P (JN1) made by Japan Aviation Electronics Industry	RU77 cable extention		



CH33-***, CE28-***

CH33-***: 30 m, CE28***: 15 m

FANUC ainterface

Mitsubishi Electric

Mitsubishi Electric

YASKAWA Electric

Type Number of wires NC manufacturer

Full duplex

Half duplex

D | Full duplex

Unit: mm

RU77-4096A□F★○○

YASKAWA Electric

21 bit (2,097,152 pulses/revolution)

[OO]Cable length

05 0.5 m 10 1 m

15 1.5 m 20 2 m 25 2.5 m 30 3 m 40 4 m 50 5 m

60 6 m 70 7 m 90 9 m

Type Cable length